

Metropolitan **Planning Council**

Calumet Stormwater Collaborative Green Infrastructure Baseline Inventory



Justin Keller
August 11, 2020

Calumet Stormwater Collaborative

Cross-sector group of stakeholders

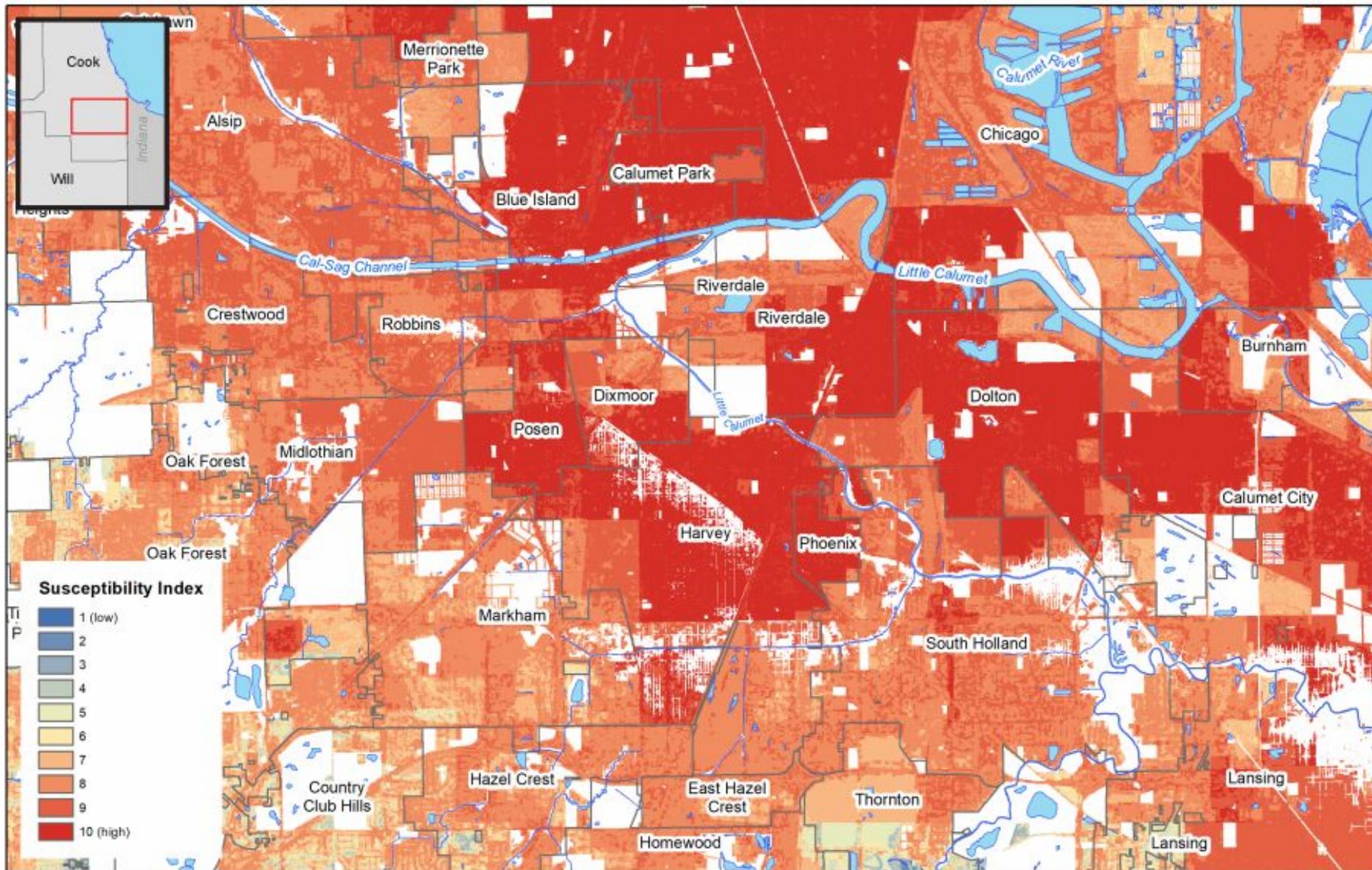
- municipalities, government agencies, nonprofits, conservation groups, land owners, land managers, and more

Improve coordination

- knowledge, technology, and financial resources to minimize the negative impacts of stormwater in the Calumet region of Illinois

RISK OF URBAN FLOODING IN THE CALUMET REGION OF ILLINOIS

Based on CMAP's Regional Flood Susceptibility Index (2018)



Data: CMAP Data Hub (datahub.cmap.illinois.gov); Census TIGER/Line® Shapefiles (census.gov); Cook County Government Open Data (datacatalog.cookcountyil.gov)
Projection: NAD 1983 StatePlane Illinois East FIPS 1201 Feet

0 0.5 1 2 3 4 Miles

CHICAGO SUN-TIMES

ENVIRONMENT NEWS METRO/STATE

Chicagoans swamp city with flood complaints after spring's record rain

A Sun-Times analysis shows the city received more than 27,000 reports to 311 about flood-related problems in the past two years.

By Brett Chase and Caroline Hurley | Jul 20, 2020, 5:30am CDT



SHARE



A jogger runs past a flooded field in Humboldt Park on May 18, 2020. | Tyler LaRiviere/Sun-Times

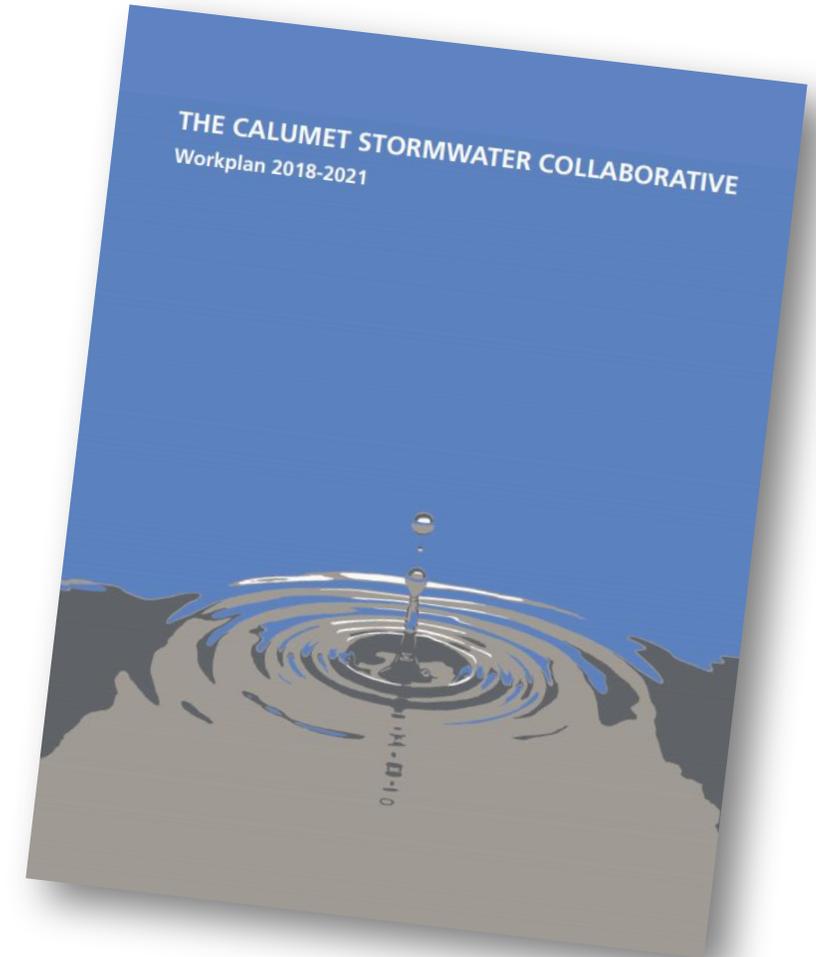
Omar Vega moved into his East Side home three years ago, and he's endured basement flooding each spring or summer since.

This past May, he said water came up through two drains and left around 6 inches of "very stinky" sewer backup standing in his basement, destroying carpet and some other items.

"It's the same old story," he said of the recurring problem at his home, a perennial misery faced by tens of thousands of Chicagoans.

CSC 3-year Work Plan

- One **fundamental challenge** to managing stormwater in any geography is coordinating among various government units, agencies, and regional and local organizations
- *3-year Work Plan* = consensus-based plan with mutually reinforcing activities and coordinated collective efforts



Fundamental Goals

Significant reduction in non-overbank flooding

Grey and green infrastructure maintains its designed performance over time

Increase municipal capacity and reduce fragmentation across Calumet government actors

Data-driven decision-making is more prevalent in stormwater management planning

Foundational Activities

ACTIVITY 1

- Establish a baseline of existing green infrastructure

ACTIVITY 2

- Establish a baseline of non-overbank flooding

ACTIVITY 3

- Develop and begin to execute systems to provide relevant training and strengthen management systems to bolster green infrastructure implementation and maintenance

ACTIVITY 4

- Establish a baseline of municipal capacity in stormwater management

Foundational Activities

ACTIVITY 1

- Establish a baseline of existing green infrastructure

ACTIVITY 2

- Establish a baseline of non-overbank flooding

ACTIVITY 3

- Develop and begin to execute systems to provide relevant training and strengthen management systems to bolster green infrastructure implementation and maintenance

ACTIVITY 4

- Establish a baseline of municipal capacity in stormwater management

GI Baseline – Phase 1

- Literature review of similar efforts (Milwaukee, DC, DuPage County)
- Advisory Committee meetings (Jan-June 2019) + survey
- Interviews with municipal actors
- CSC + Work Group meetings



Primary functions/uses

Near-term: Assess the location, performance and maintenance status of existing green infrastructure.

Long-term: Strategically plan and guide investments in new green infrastructure that will have the greatest impact.



Primary users

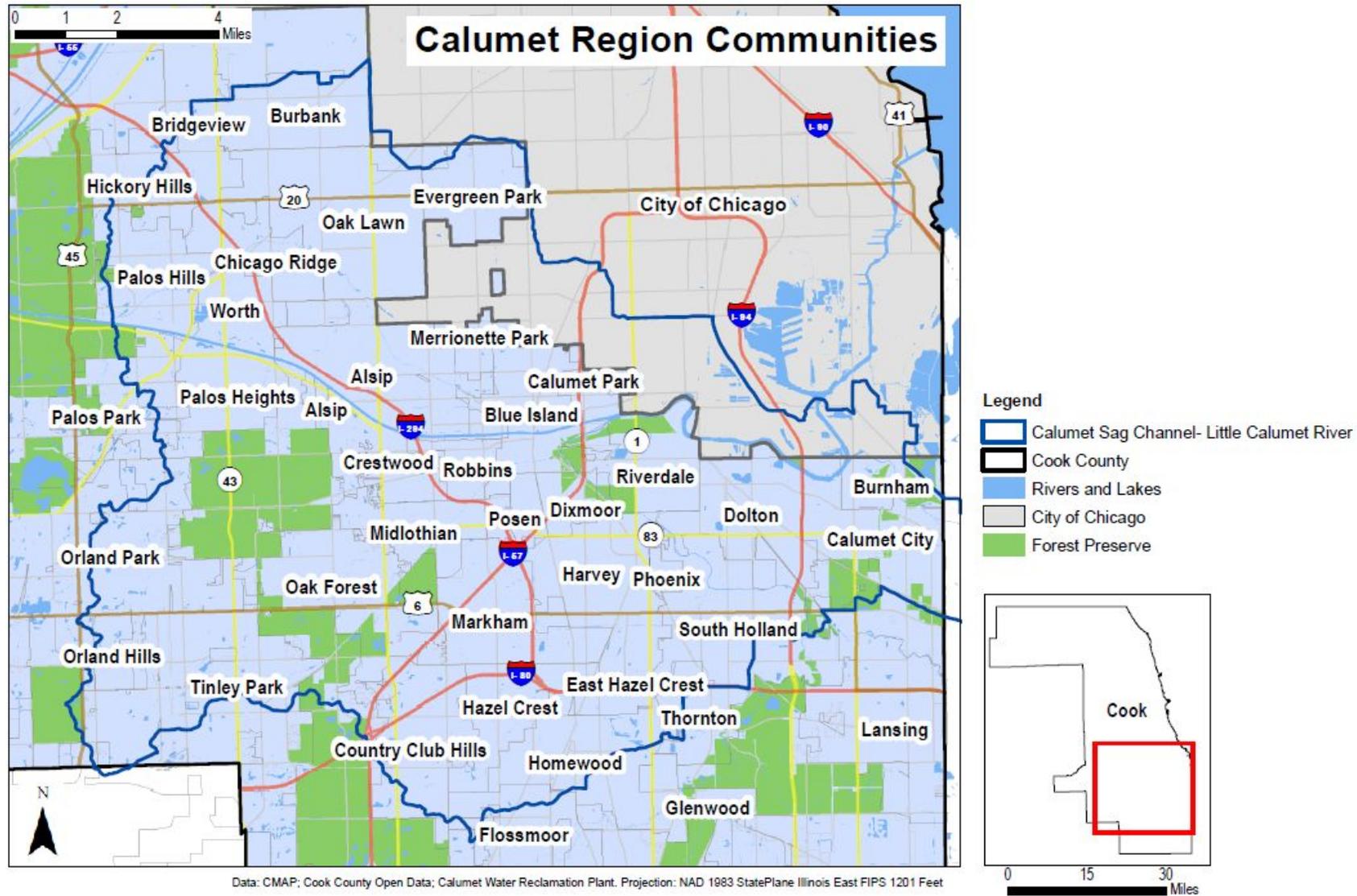
Near-term: CMAP, MWRD, CDOT, IDOT, IDNR, IEPA and other regional planning agencies, plus MPC, CSC member agencies, and other actors in collaboration with municipalities and other units of local government

Long-term: Same as above plus funders, researchers, etc.

Options considered

- Dataset, such as a geographic information system (GIS) layer
- Web-based map with suite of relevant data layers (e.g., FEMA floodplains, combined sewer areas)
- Custom-built application with analytic functionality

Target geography



GI Baseline – Phase 2

1. Convene data providers
2. Collect existing data
3. Contact main Calumet-region engineering firms
4. Conduct direct outreach
5. Build the dataset

Detroit Stormwater Hub

Total Projects

203

Total Acres Managed

632.8

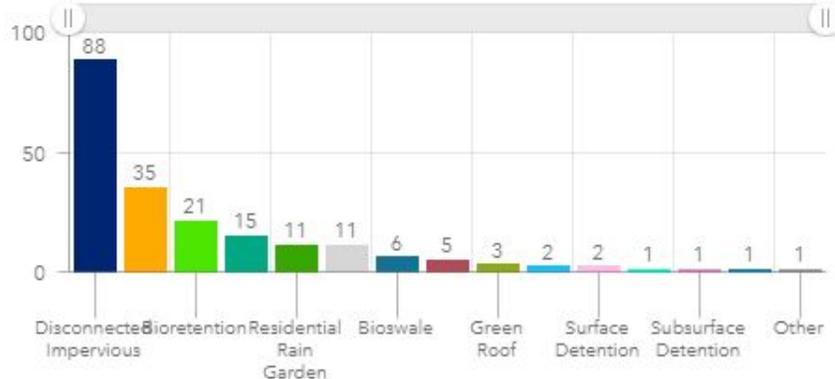
Millions of Gallons

363.6

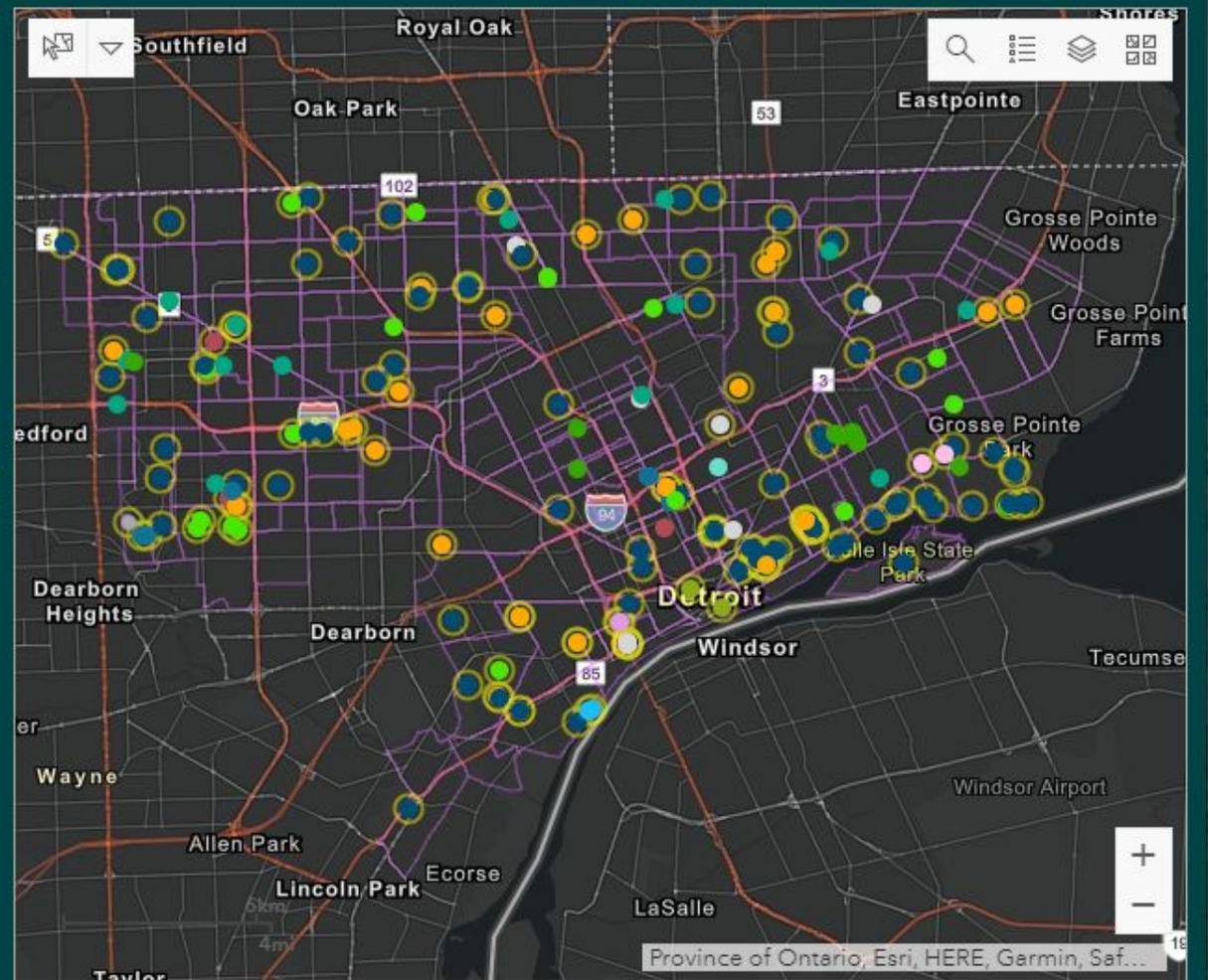
Managed Annually

Projects by GSI Type

(Click graph to filter)



Last update: a few seconds ago



This website includes public, private, and community GSI projects. As such, the metrics below are unofficial and may differ from officially reported NPDES permit metrics.

Metropolitan **Planning** Council

Thank you!



Justin Keller
jkeller@metroplanning.org